

NYS Health Connector

New York State Student Weight Data Explorer

Overview

Office of Public Health
Center for Community Health
Bureau of Chronic Disease Evaluation and Research

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Introduction

Obesity has reached epidemic proportions in New York State (NYS) and across the nation. While many epidemics can be defeated with a pill or a vaccine, preventing or reversing obesity requires changes in behavior as well as access to affordable, nutritious foods and opportunities for physical activity in the places where people live, learn, eat, shop, work and play.

The Student Weight Status Category Reporting System (SWSCR) was established by amendments to the New York State Education Law (§ 903 and 904) in 2007 to support state and local effort to address childhood obesity.

(<http://www.p12.nysed.gov/sss/schoolhealth/schoolhealthservices/s903.html>)

The amendments added body mass index (BMI) and weight status category based on BMI-for-age (underweight, healthy weight, overweight and obese) to the school health certificates and health appraisals required at school entry and for students in grades 2, 4, 7 and 10. They also required a sample of school districts to report aggregate weight status category to the Department of Health each year. Public schools in the five boroughs of New York City, BOCES and Charter Schools were exempt from the annual reporting requirement.

Since the 2010-11 School Year, public school districts have reported data on the weight status of students to the Student Weight Status Category Reporting using consistent methods. The system enables estimates of the prevalence of childhood obesity and overweight among public school students in Upstate New York. Data from SWSCR are used to understand the severity and distribution of obesity among youth of various ages in different regions of the state. The information is also used to evaluate whether actions taken by local schools, school districts and communities to improve access to healthy foods and to increase physical activity are making a difference and reducing childhood obesity rate.

More information about ongoing obesity prevention program and activities in New York is available at: https://www.health.ny.gov/prevention/obesity/prevention_activities/

Dashboard Data Sources and Methods

Each year, a 50% sample of public-school districts (excluding those in the five boroughs of New York City (NYC) which are exempt from NYS Education Law Sections 903 and 904) is notified that they have been selected to report aggregated student weight status category information to the New York State Department of Health (NYSDOH) electronically, using the Health Commerce System (HCS). The following year, the remaining 50% of school districts are notified to submit weight status information to the HCS. Annual data are summarized for New York State, Regions, and Counties and reported for the following reporting periods: 2010-2012, 2011-2013, 2012-2014, 2013-2015, 2014-2016, 2015-2017, 2016-2018 and 2017-2019. The data used for consecutive reporting periods overlap because

school districts who reported in the second year of the period, will also be included in the next two-year reporting period. For example, data from school districts who reported in 2011-2012 will be included in the 2010-2012 and 2011-2013 for State, Region and County totals. Data for school districts are reported for the individual school years they were required to submit data. For example, for the reporting period 2010-2012, 50% of school districts reported in 2010-2011, and the remaining 50% reported in 2011-2012. The cycle repeats for the successive school years up through 2019.

Student BMI is reported from health examination forms (certificates/appraisals) provided to the school from the PREVIOUS school year. Forms submitted for students in grades Pre-K/K, 2, 4, 7 and 10 are used as the documentation for students currently in grades 1, 3, 5, 8 and 11. Schools are required to report aggregated student weight status category data for either pre-Kindergarten (Pre-K) or Kindergarten based on a student's official school entry. If students attended Pre-K in the previous year, the mandated exam form from Pre-K would be used to report for those students currently in Kindergarten. Values are aggregated by grade and sex for each school district based on the following sex-specific BMI-for-age percentiles: underweight (less than 5th), healthy weight (5th through 49th), healthy weight (50th through 84th), overweight (85th through 94th), obese (95th and greater).

Student weight status category data is combined by three grade levels for all schools in the school district. The three grade levels are: Pre-K, K, 2 and 4 (Elementary), 7 and 10 (Middle/ High) and Pre-K, K, 2, 4, 7 and 10 (District Total).

To maintain compliance with the federal Family Educational Rights and Privacy Act (FERPA), school districts are not allowed to report data to the NYDOH when the number of students in a weight status category is less than 5. If the number of students in a weight status category is less than five, then the field is blank.

County codes assigned by New York State Department of Education (NYSED) are used to generate the county level estimates of student weight status. Data from school districts within a county were aggregated to produce estimates of the percent of students who were reported to be in each of the five weight status categories. Percentages were calculated by dividing the number of reported students in a weight status category by the total number of students with weight status category information. The dataset includes separate estimates of the percent of students that are overweight, obese or overweight and obese for all reportable grade groups (elementary and middle/high) within the county.

Region level estimates were calculated by aggregating county data using the regional groupings outlined below (see "Regions" in the Definitions section).

In 2018 the New York State Education Department changed the grades when a health examination form is required for students. Starting with the 2018-19 school year, health examination forms were required for public school students at school entry (pre-Kindergarten

or Kindergarten) and for grades 1, 3, 5, 7, 9 and 11. These changes will be reflected in the data school districts report to the NYDOH starting with the 2019-2020 school year.

How to Use the New York State Student Weight Data Explorer

The Student Weight Data Explorer is presented in four dashboards supporting a variety of reporting use cases.

Users can choose between rates for obesity, overweight, obesity and overweight, and healthy weight. These rates appear in the dashboards at the following levels: (a) Statewide, (b) Regionwide, and (c) Countywide. Users can find data for the following School District Grade Levels of Middle/High, Elementary, or District Total.

Metrics

Users can select from three metrics, the Weight Status Categories, using dropdown boxes with each of the dashboards. The metrics selected will be displayed in the impacted charts and tables. The metrics for Student Weight Dashboard are: (a) Percent Obese, (b) Percent Overweight, (c) Percent Obese or Overweight, and (d) Percent Healthy Weight.

Additionally, the School District Profile allows for a choice of a comparison rate of either the Statewide or the Countywide rate. Note, the Statewide rate excludes data from NYC school districts.

Selection of Filters

The selection filter dropdown boxes can be used to limit the data displayed in the charts and graphs for the selected population. The selection filters that are available are: (a) Statewide, (b) Countywide, (c) Regionwide, and (d) individual School District.

All reports, except for Compare Districts, include filters for “Population of Focus” where (a) All, (b) Male, or (c) Female values can be chosen.

Additional Dashboard Features

Dashboard Navigation:



Users can easily scroll between dashboards using the arrows located at the top right of the dashboard.



Users can return the home page by selecting the home icon located at the top left of the dashboard.

Information Icon:



Users can hover over the *information icon* to find out additional detail and tips related to each dashboard.

View 1: School District Profile

The School District Profile tab provides information on rates of overweight, obese, overweight or obese, and healthy weight by grade level (elementary or middle/high, and district total) for a single public-school district




[Find a School District Profile](#)



(note: NYC school districts are not included). Data from the county in which a district is located, as well as statewide rates, are also provided in the circles within the bar charts for comparison. Trends over time for a given school district from 2010-2011 to 2018-2019 are provided.

For smaller school districts, complete reporting may not have been achieved due to restrictions in reporting as outlined by the Family Education Rights Privacy Act (FERPS). In these cases, there may be only information for healthy weight displayed. It should not be interpreted that these school districts do not have any students with overweight or obesity. Information for these school districts should be interpreted with caution.


Users select a School District, Student Weight Category, Population of Focus and Comparison Rate for the school district (Statewide or Countywide) using the dropdown boxes at the top of the page.

 School District Profile  

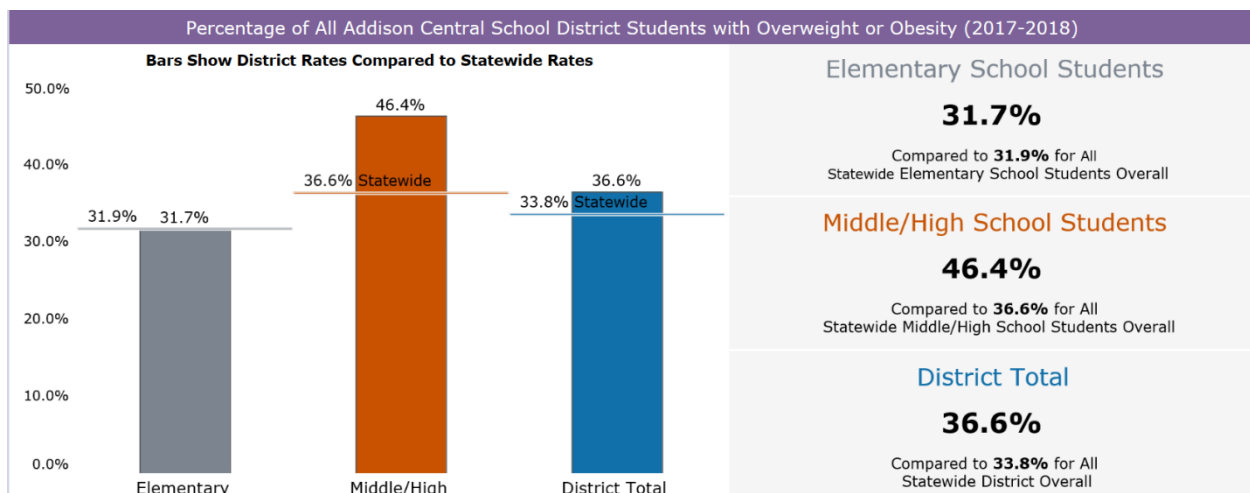
Step 1 Select a School District or Enter Name to Search

Step 2 Select Weight Status Category

Step 3 Select the Population of Focus

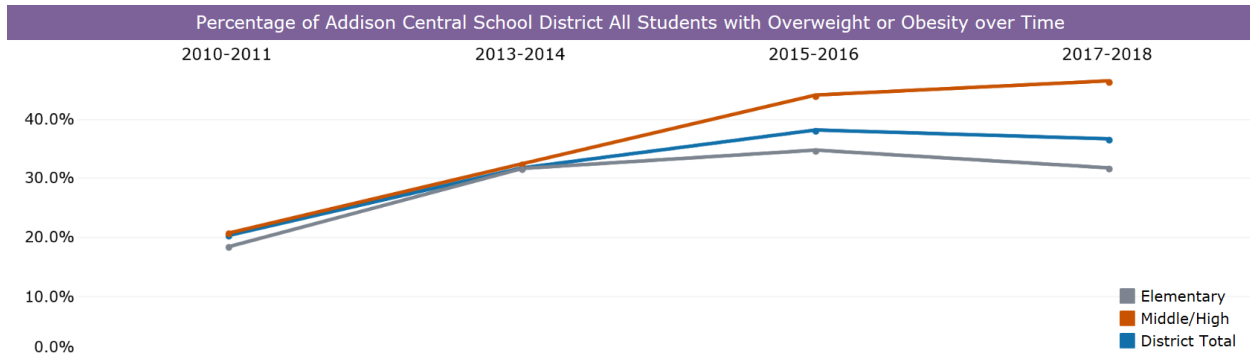
Step 4 Select Comparison Rate 

The bar charts show the rate of the selected weight status category for each Grade Category with the Statewide or Countywide values depicted as lines for targets. The bolded numbers on the right-hand side show the selected Student Weight Category values by Grade Category for the selected Statewide or Countywide value.



View 1: School District Profile (continued)

The all period trend for the three Grade Categories is displayed as a line chart in the middle section of the School District Profile.



The data table in the lower section of the dashboard displays weight status information reported by the selected school district in a cross tabular format. Data on each of the four weight status metrics (obese, overweight, overweight or obese, and healthy weight) is provided for all three Grade Categories for each year the school district reported data.

All Student Weight Data Table for Addison Central School District		2010-2011	2013-2014	2015-2016	2017-2018
Elementary	Percent Obese	9.2%	16.3%	17.2%	17.7%
	Percent Overweight	9.2%	15.3%	17.5%	14.0%
	Percent Overweight Or Obese	18.4%	31.6%	34.7%	31.7%
	Percent Healthy Weight	81.6%	65.1%	63.4%	66.4%
Middle/High	Percent Obese	7.4%	25.4%	26.9%	29.1%
	Percent Overweight	13.2%	7.0%	17.1%	17.2%
	Percent Overweight Or Obese	20.7%	32.4%	44.0%	46.4%
	Percent Healthy Weight	79.3%	67.6%	55.9%	53.6%
District Total	Percent Obese	10.0%	18.0%	20.7%	21.6%
	Percent Overweight	10.3%	13.7%	17.4%	15.0%
	Percent Overweight Or Obese	20.3%	31.7%	38.1%	36.6%
	Percent Healthy Weight	79.7%	65.6%	60.7%	61.0%

View 2: Compare Districts

Compare School Districts

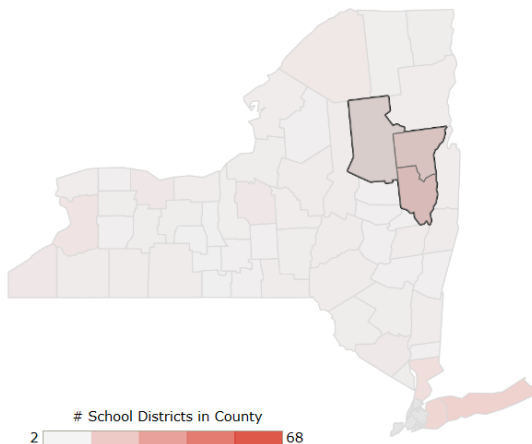


The Compare School Districts tab provides the ability to compare the most recent reported rates of Percent Obese, Percent Overweight, Percent Overweight or Obese, and Percent Healthy Weight by grade level for multiple school districts.

Step 1 indicates to highlight a given county from the map of NYS to obtain a drop-down list of school districts within that county. Users can select multiple counties by holding the 'Ctrl' key and highlighting multiple counties (see below). The NYS map shows the counties with color shading by the count of school districts in the county for the most recent data period. Note, the five NYC counties on the map are shaded dark gray indicating "No Data to Display."

Step 2 is to select the student weight status category to compare. The options are percent obese, overweight, overweight or obese and healthy weight.

Step 1 Click on a county to see county's school districts.
Ctrl-Click to see multiple counties
-or Click and Drag to see multiple counties.



Step 2 Select Student Weight Category to Compare

Percent Obese



Click on a school district name to display district data below.

Step 3 Ctrl-Click to see multiple school districts.

Hover on Bullet for more information on the Needs Resource Index: ●

School District	County	Needs Resource Index	2019 Enrollment
Shenendehowa Central School District	Saratoga	Average N/R/C	9,718
Saratoga Springs City School District	Saratoga	Average N/R/C	6,341
Ballston Spa Central School District	Saratoga	Average N/R/C	4,084
Queensbury Union Free School District	Warren	Average N/R/C	3,196
Burnt Hills-Ballston Lake Central Scho..	Saratoga	Low N/R/C	3,059
South Glens Falls Central School Distri..	Saratoga	Average N/R/C	3,019
Glens Falls City School District	Warren	Average N/R/C	2,048
Schuylerville Central School District	Saratoga	Average N/R/C	1,538
Mechanicville City School District	Saratoga	Average N/R/C	1,334
Corinth Central School District	Saratoga	Average N/R/C	1,161
Stillwater Central School District	Saratoga	Average N/R/C	1,017
Galway Central School District	Saratoga	Average N/R/C	788
Waterford-Halfmoon Union Free Schoo..	Saratoga	Average N/R/C	756
Lake George Central School District	Warren	Average N/R/C	749
Warrensburg Central School District	Warren	Average N/R/C	698
Hadley-Luzerne Central School District	Warren	High N/R/C	654
North Warren Central School District	Warren	Average N/R/C	506
Johnsburg Central School District	Warren	Average N/R/C	311
Bolton Central School District	Warren	Low N/R/C	172
Glens Falls Common School District	Warren	High N/R/C	163

Step 3 is to select the school districts to compare. The full list of school districts in all the highlighted counties will then be listed on the right (see above). Hold the 'Ctrl' key to select school districts for which to display the weight status data. The Needs Resource Index and School District Enrollment are provided to allow comparison of school districts by student size or needs resource index value as defined by 2019 New York State Education data.

View 2: Compare Districts (continued)

Data for the school districts selected are presented in a table at the bottom of the page.

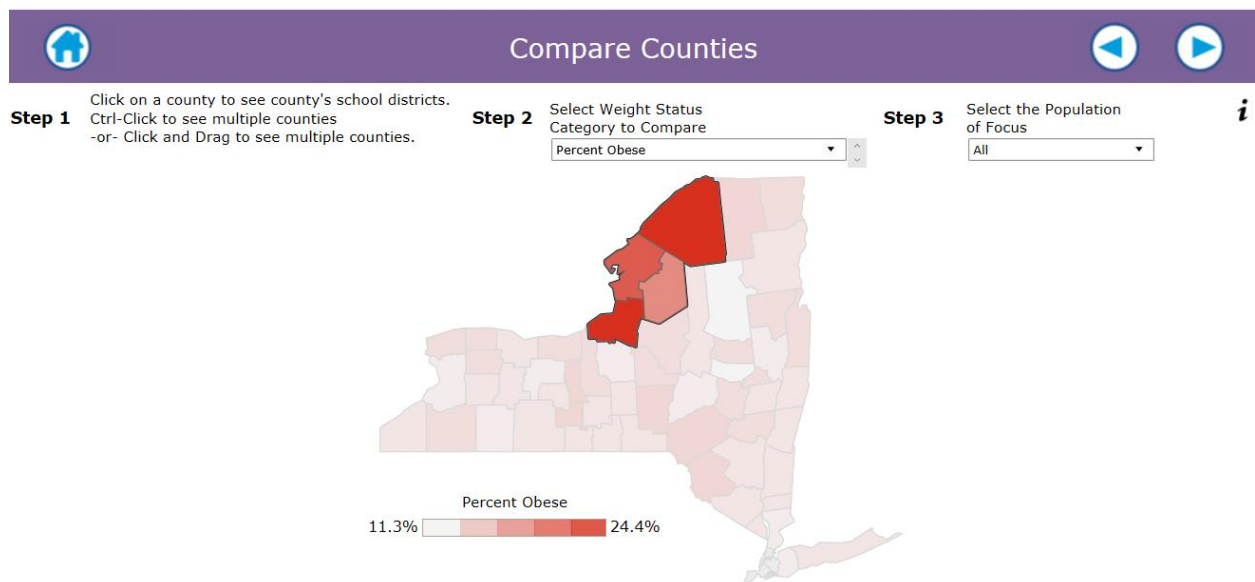
Compare Percent Obese for Most Recent School Year by Grade Level			
Statewide Elementary School Students 16.2% with obesity		Elementary	Middle/High
	Bolton Central School District	19.2%	20.5%
	Mechanicville City School District	14.6%	18.9%
	South Glens Falls Central School District	11.9%	14.6%
	Saratoga Springs City School District	8.6%	10.2%
Statewide Middle/High School Students 19.1% with obesity			
Statewide District Total 17.3% with obesity			

View 3: Compare Counties

Compare Counties



The Compare Counties tab provides the ability to compare rates of Percent Obese, Percent Overweight, Percent Overweight or Obese, and Percent Healthy Weight collected during the 2017-2019 school years by grade level for multiple counties. To get started, highlight a county or hold the 'Ctrl' key and highlight multiple counties. The five NYC counties on the map are shaded dark grey indicating "No Data to Display." Then choose the weight status information of interest: obesity, overweight, overweight or obesity, and healthy weight. Finally, select the population of focus: All, Male, or Female.



The data for the selected counties will appear at the bottom of the page. Statewide data are listed on the left-hand side for comparison.

Compare Percent Obese for 2017-2019 by Grade Level for All					
<div>Statewide Elementary School Students All 16.2% with obesity</div>		Countywide Elementary	Countywide Middle/High	Countywide District Total	
		Jefferson	16.7%	24.9%	19.2%
		Lewis	15.9%	22.6%	18.7%
		Oswego	24.3%	23.6%	24.0%
		St. Lawrence	22.0%	27.8%	24.4%
<div>Statewide Middle/High School Students All 19.1% with obesity</div>					
<div>Statewide District Total All 17.3% with obesity</div>					

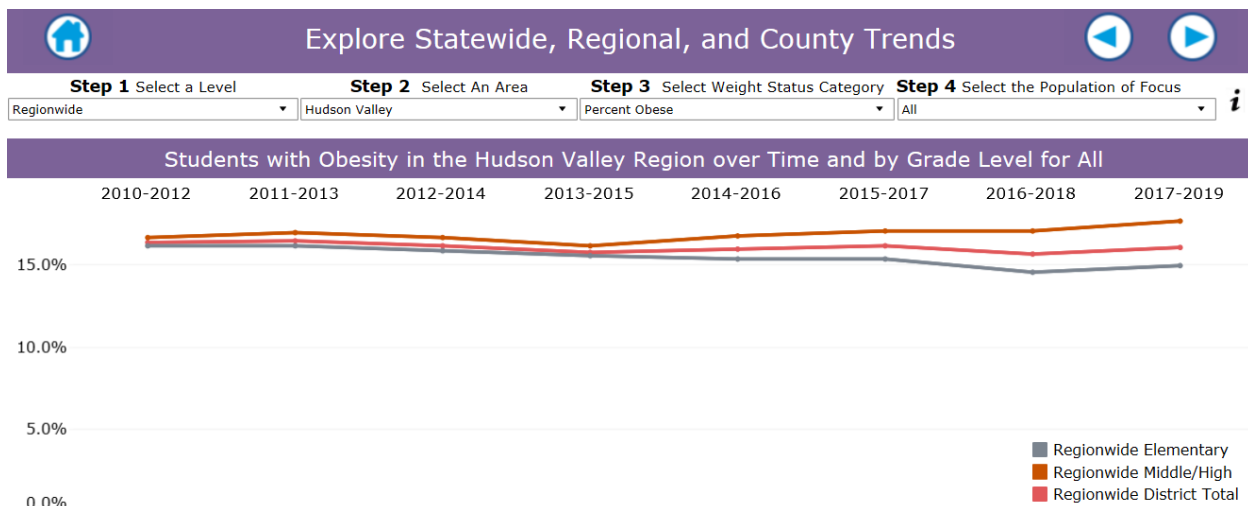
View 4: Explore Statewide, Regional and County Trends

[See Statewide, Regional, and County Trends](#)



The Explore Statewide, Regional and County Trends tab provides rates of Percent Obese, Percent Overweight, Percent Overweight or Obese, and Percent Healthy Weight by grade level for NYS, region or county over time from 2010-2012 through to 2017-2019.

In Step 1 users select a Level of geography (Statewide, Regionwide, or Countywide). For Regionwide and Countywide levels Step 2 allows users to select a specific Area in the state or county (based on selection). Step 3 allows the user to select Weight Status Category, and Step 4 allows the user to select Population of Focus (female students, male students, or all students). Data will be displayed as a Line Chart and Table for all three grade categories and weight status categories over time in the dashboard.



The data table displays the data displayed in the figure in numeric form. The title lists the geographic level (Statewide, Regionwide, or Countywide) and population of focus.

Student Weight Data Table For Hudson Valley Region for Female									
		2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
Regionwide Elementary	Percent Obese	15.1%	14.7%	15.3%	14.9%	14.2%	14.2%	13.4%	13.9%
	Percent Overweight	15.5%	15.3%	15.2%	15.2%	15.1%	15.2%	15.8%	15.9%
	Percent Overweight Or Obese	30.6%	30.1%	30.5%	30.1%	29.3%	29.4%	29.2%	29.7%
	Percent Healthy Weight	66.7%	66.6%	66.2%	66.6%	67.0%	67.0%	66.9%	66.1%
Regionwide Middle/High	Percent Obese	14.2%	14.5%	14.7%	14.0%	14.3%	14.7%	15.3%	15.7%
	Percent Overweight	16.8%	16.8%	16.6%	16.7%	16.9%	16.9%	17.6%	18.2%
	Percent Overweight Or Obese	31.0%	31.3%	31.3%	30.8%	31.2%	31.7%	32.8%	33.9%
	Percent Healthy Weight	66.9%	66.7%	66.3%	66.8%	66.4%	66.1%	65.0%	63.8%
Regionwide District Total	Percent Obese	14.8%	14.6%	15.1%	14.7%	14.3%	14.5%	14.3%	14.7%
	Percent Overweight	16.1%	15.9%	15.8%	15.9%	15.7%	16.0%	16.9%	17.0%
	Percent Overweight Or Obese	30.9%	30.5%	30.9%	30.6%	30.1%	30.5%	31.2%	31.7%
	Percent Healthy Weight	66.5%	66.5%	65.8%	66.3%	66.6%	66.2%	65.4%	64.8%

Definitions

BMI: Body Mass Index. A measure of body fat based on weight and height.

FERPA: Family Educational Rights and Privacy Act. A federal law that protects the privacy of student education records.

Grade-Level: Elementary (students in Pre-K, K, Grades 2 and 4), Middle/High (students in Grades 7 and 10), District Totals (students in Pre-K, K, grades 2, 4, 7, 10, where applicable by school district).

HCS: Health Commerce System. A secure online communications system operated by the NYSDOH. It supports the exchange of routine and emergency statewide health information by local health departments and health facilities, providers and practitioners.

Need/Resource Index: A measure of a school district's ability to meet the needs of its students with local resources.

<http://www.p12.nysed.gov/irs/accountability/2011-12/NeedResourceCapacityIndex.pdf>

NYSED: New York State Department of Education

Percent Obese: Percent of all students with a body-mass-index at or above the 95th and greater percentile

Percent Overweight: Percent of all students with a body mass-index in the 85th to 94th percentile

Percent Overweight or Obese: Percent of all students with a body mass-index at or above the 85th and greater percentile

Regions:

Northeastern New York: Albany, Clinton, Columbia, Delaware, Essex, Franklin, Fulton, Hamilton, Greene, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

Central New York: Cayuga, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence, Tompkins

Finger Lakes: Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Wayne, Yates

Hudson Valley: Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester

Nassau-Suffolk: Nassau, Suffolk

New York – Penn: Broome, Chenango, Tioga

Western New York: Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming

How to Interpret the Data

Reviewing data by school district, county and/or region can provide additional information to better focus obesity related school and community interventions among children and adolescents. More information about evidence-based interventions to address childhood obesity and the root causes, unhealthy eating and inadequate physical activity, can be found in the New York State Prevention Agenda within the Prevent Chronic Disease Action Plan: https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/chr.htm

Limitations

Because school district boundaries do not align with county boundaries, the county estimates reflect data from students attending school within schools assigned a particular county-code by NYSED. County assignment is not based on student county of residence. These data should not be considered to represent all school aged-children attending school in that county because of: restrictions in reporting due to FERPA, parents'/guardians' ability to request that their child's weight status data be excluded from reporting and other sources of missing data.

Because of restrictions in reporting due to the FERPA there can be wide variation in how much of the student population is represented in the data that school districts submit. This can limit researchers' ability to draw absolute conclusions about observed differences in student weight status among counties. Starting with the 2010-11 school year, the reporting system was changed to require reporting of aggregate data for grade categories (as opposed to grades) from schools to aggregate data by school districts. Changes made to the SWSCR effective 2010-11 enable more data from smaller school districts to now be represented.

De-identification

The NYSDOH adheres to all applicable federal and state rules, regulations and standards for the de-identification of protected health information. For more information on de-identification methods, please visit: https://www.hhs.gov/hipaa/for-professionals/privacy/special-topics/de-identification/index.html#_edn1.

Contact Information

For more information or questions about this data, please contact nysapd@health.ny.gov.